

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

May 23, 1983

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - BABCOCK & WILCOX'S NONCONSERVATIVE
ANALYSIS OF NEUTRON FLUX - NCR BLN NEB 8007 - EIGHTH INTERIM REPORT

On November 5, 1980, R. W. Wright, NRC-OIE Region II, was informed that the subject nonconformance was determined to be reportable in accordance with 10 CFR 50.55(e). This was followed by our interim reports dated December 3, 1980, March 30 and September 21, 1981, and February 22, April 27, August 10, and November 16, 1982. Enclosed is our eighth interim report. We consider 10 CFR Part 21 to be applicable to this deficiency. We expect to submit our next report by October 24, 1983.

If you have any questions concerning this matter, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills
L. M. Mills, Manager
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. R. J. Ansell (Enclosure)
Bellefonte Project Services
Babcock & Wilcox Company
P.O. Box 1260
Lynchburg, Virginia 24505

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
BABCOCK AND WILCOX'S (B&W) NONCONSERVATIVE ANALYSIS OF NEUTRON FLUX
NCR BLN NEB 8007
10 CFR 50.55(e)
EIGHTH INTERIM REPORT

Description of Deficiency

B&W's measurement errors assumed in determining Reactor Protection System (RPS) setpoints may be nonconservative under specific plant conditions. These errors may allow operation outside the established safety limits in certain design basis events.

The events of concern are: small overcooling and small steam line break; large steam line break in containment; and the rod ejection accident.

Interim Progress

TVA is still awaiting the results of B&W's analysis to show that the neutron flux error is within limits and does not present a safety concern. B&W's schedule for the analysis completion has recently slipped because B&W has discovered a new "worst case" condition which must be taken into account. TVA will provide more information upon receipt of the subject analysis.